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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/802,027	03/17/2004	Yukio Shoji	040122	3468
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ARMSTRONG, KRATZ, QUINTOS, HANSON & BROOKS, LLP 1725 K STREET, NW SUITE 1000 WASHINGTON, DC 20006				
			EXAMINER DRODGE, JOSEPH W	
			ART UNIT 1723	PAPER NUMBER

DATE MAILED: 12/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/802,027

Applicant(s)

SHOJI ET AL.

Examiner

Joseph W. Drodge

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 30 October 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

Claims 4,5 and 12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 4 and 5, based on the filter arrangement of the figure 2 embodiment having inlet and outlet at the bottom of the filter housing, conflicts with independent claim 1 which is based on the filter arrangement of the figure 1 embodiment in which the inlet and outlet are at the top portion of the filter housing.

Claims 1-12 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. For independent claims 1 and 8, recitation of the fluid being directed in a taper-like fashion is not explicitly supported by pages 18-19 of the Specification, as alleged. Instead, the instant Specification states that the flow guide 5, itself is tapered. For independent claim 12, the Specification at pages 25-27 states that falling-off preventing element 31b, itself, traps foreign matter which has passed through element 31a, however does not support claiming of foreign matter being trapped between the elements. **Hence both recitations constitute New Matter, it is required that the claims be amended so as to be commensurate with the Specification, or alternatively the New Matter deleted from the claims.**

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Claims 4 and 5 remain rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The Specification lacks any support for dependent claims 4 and 5, since independent claim 1 and the dependent claims are based on different embodiments as shown in figures 1 and 2, respectively and there is no indication that features of the figure 1 embodiment can be combined with features of the figure 2 embodiment, especially to switch the top inlet and outlet of claim 1 to the bottom portion of the housing. It is emphasized that claim 1 requires structure to effect sprouting up of flow from the bottom portion of the inflow chamber (effected by instant guide element 7 (only present in the figure 1 embodiment having a top inlet 13c) while claims 4 and 5 require a bottom inlet (only present as inlet 25a or 25b of the figure 2 embodiment).

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-6 and 8 are rejected under 35 U.S.C. 102(b) as being anticipated by Hull patent 1,197,634.

Hull discloses [for claims 1 and 8] inflow chamber communicating with inlet 12, outflow chamber communicating with outlet 13, filter element 29 or 30, spouted-up portion or 1<sup>st</sup> guide to reverse the downward flow of incoming liquid and produce a rising flow of liquid (figure 1) and 2<sup>nd</sup> guide in the form of downflow pipe 31 that forces flow downward towards bottom portion of the inflow chamber [for claims 2 and 8], at least the bottom portion of the guide pipe having a narrowed flow portion, and also the portion of guide 18 proximate pipe portion 19 presenting a narrowed flow portion [claim 3], this latter portion of guide 18/19 serving as an inlet to the flow-rising portion of the inflow chamber [for claims 4 and 5], with both the 1<sup>st</sup> guide 18/19 and 2<sup>nd</sup> guide of downflow pipe 31 having stream-lined shapes [for claim 6]. ***Hull additionally discloses filter element 30 being conically or taper shaped (page 1, lines 108-109) hence, together with deflector 20, inherently acting as a further flow guide and producing upward and inwardly tapered components of flow in the direction of or towards filter element 29 which is also tapered, relative to the upward direction of flow imparted by deflector 20 and filter element 30. If necessary, the taper-like shape of filter***

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***element 29 also effects a flow that has tapering components relative to a generally upwards flow path.***

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Claims 10 and 11 are rejected under 35 U.S.C. 102(b) as being anticipated by Casaleggi patent 3,070,232.

Casaleggi discloses inflow portion communicated with inlet 13, outflow portion communicating with outlet 14, and a filter element comprising target trapping element 41 supported by fall-off preventing element 33 lining the side of the annular inflow chamber, which traps some of the solid impurities being filtered and thus prevents them from falling. ***Trapping of foreign particulate matter or contaminants is a function of any fluid filtering element (column 1, lines 14-15 disclose the fluid being filtered as having solid impurities). When the quantity of trapped impurities reaches a given threshold, a signal is activated (column 1, lines 29-35, etc.).***

For claim 11, Casaleggi also teaches a differential pressure sensor 26, whose details are extensively discussed at column 3, line 21-column 4, line 8 to alert of the filter element being clogged and needing cleaning.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.

4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 7,9 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hull in view of Casaleggi. These claims differ in requiring a differential pressure sensor to detect pressure differences between inflow chamber and outflow chamber. However, Casaleggi teaches a differential pressure sensor 26, whose details are extensively discussed at column 3, line 21-column 4, line 8. It would have been obvious to have incorporated a differential pressure sensor of Casaleggi into the Hull oil filtering device, to alert of the filter element being clogged and needing cleaning.

Applicant's arguments with respect to claims 1-12 have been considered but are moot in view of the new ground(s) of rejection. It is argued that claims 4 and 5 do not conflict with claim 1 since all 3 claims are directed to rising flow of fluid from the bottom portion of the chamber towards the filter element. Nevertheless, claim 1 refers to function of element 7, a feature shown only in the figure 1 embodiment which has a top



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inlet 13c, while claims 4 and 5 refer to a bottom inlet 25a shown only in the figure 2 embodiment.

It is argued that Hull does not teach a structural feature effective to cause fluid to flow into a taper-like fashion. However, this office action adds discussion of effects of tapering upstream filter element 30 that is upstream of tapering filter element 29, both of which effect components of tapering flow in the generally upwardly directed flow path. The claims are not specific as to whether the tapering is outwardly or inwardly relative to the vertical axis of the filter and the general flow path.

It is argued that Casaleggi does not disclose trapping of material by a filter element since it refers back to Patent 2,622,738 that does teaches a self-supporting filter of rigid construction that requires no supporting frame, the '738 reference not mentioning trapping of solid impurities. It is submitted that any filter element used to filter solid impurities from a flowing fluid serves to trap some amount of impurities between or along it's pores. In fact, Casaleggi teaches to activate a signal when the level of trapped impurities reaches a certain point (column 1, lines 29-34). Whether the filter element(s) are self-supporting or have a support is immaterial to the trapping function effected by the filtration.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph Drodge at telephone number 571-272-1140. The examiner can normally be reached on Monday-Friday from 8:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wanda Walker, can be reached at 571-272-1151. The fax phone number for the examining group where this application is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either private PAIR or Public PAIR, and through Private PAIR only for unpublished applications. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have any questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JWD

December 5, 2006

*Joseph Drodge*  
*Primary Examiner*